

Cupes and Daedalea.

Cupes and *Daedalea*, a wood-boring beetle and a wood-destroying fungus, associated forms of life, have names as euphonious as the inseparable Hero and Leander. Foresters often can determine the quality of an area or site or its suitability for growing certain trees by the plants that grow on it. Certain plants are indices of the type of growth the land and site may be expected to support.

When a forest entomologist sees a fruiting body of the fungus *Daedalea quercina* growing on an oak log or stump he may expect to find the larvae or young of a beetle, a species of *Cupes*, in the wood. The underside of the small fungus fruiting body has a convoluted appearance due to a labyrinth of pores. The elongate, legged beetle larvae has a dilated prothorax, prosternum with asperities, and the end of abdomen with a chitinized anal process.

Apparently the wood is capable of supporting both forms of life—which gradually reduce it back to its origin, the soil.—THOMAS E. SNYDER, Washington, D. C.

Reviews

THE NATURAL CLASSIFICATION OF THE FAMILIES OF COLEOPTERA

By R. A. CROWSON. Nathaniel Lloyd & Co., Ltd., Burrell St. Works, Blackfriars, London, S. E. 1, England, 1955. 187 pp., 213 figs. 31/ paper, 36/ cloth.

The series of papers published in the ENTOMOLOGISTS' MONTHLY MAGAZINE under the title "*The Classification of the families of British Coleoptera*" have been somewhat revised and assembled into this valuable book. I believe most coleopterists have followed this series with interest, and are happy to learn that it is available in this handy book form.

To revise the classification of the largest order of animals now known, indeed, over one quarter of the animal kingdom, is a daring undertaking, far beyond the abilities of the ordinary student. Few men have attempted such a task. Those who have, have been forced to limit their revision to a single set of characteristics, and their classifications have been based on such

features as larvae, wing venation, tarsal and sclerite characteristics, genitalia, mouthparts, or some similar set of features. I think it can be truly said then, that Mr. Crowson's monograph is a turning point in the history of coleopterology, for he has made every effort to combine all known anatomical leads in such a way as to knit together a classification that involves many startling changes based on what appears to be overwhelming evidence.

Space does not permit a lengthy review of the innovations in this work, nor would it be proper to attempt to point out the features the reviewer disagrees with. Each of us will find some points of disagreement, and perhaps a few errors in fact. It is our duty to pick this work apart in the search for truth, and this Mr. Crowson hopes for. But I think most readers will find and agree that this work is not sloppily done, and will find it hard to gather evidence for further changes for some time to come. Meanwhile, this work should be intensely studied, used, and built upon, for I think it is a major foundation work.—R. H. ARNETT, JR.